

MATERIAL SAFETY DATA SHEET

Ashland Chemical Co.

Page 001
Date Prepared: 09/21/98
Date Printed: 11/20/99
MSDS No: 999.0232602-004.002

BLEND 7650

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: BLEND 7650
Product Code: 2223789
General or Generic ID: BLEND

Company

Ashland Chemical Co.
P.O. Box 2219
Columbus, OH 43216
614-790-3333

Emergency Telephone Number:

1-800-ASHLAND (1-800-274-5263)
24 hours everyday

Regulatory Information Number:
1-800-325-3751

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredient(s) | CAS Number | % (by volume) |
|----------------------------|------------|---------------|
| XYLENE | 1330-20-7 | 71.0 |
| METHYL ETHYL KETONE | 78-93-3 | 26.0 |
| DI(2-ETHYLHEXYL) PHTHALATE | 117-81-7 | 3.9 |
| ETHYLBENZENE | 100-41-4 | 13.0- 14.0 |

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

May cause mild eye irritation. Symptoms include stinging, tearing, and redness.

Skin

May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns.

Swallowing

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

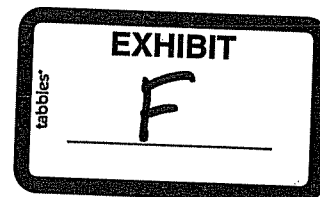
Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful.

Symptoms of Exposure

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), and death.

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Target Organ Effects

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: liver abnormalities, anemia, testis damage, eye damage, kidney damage, lung damage, brain damage, effects on hearing. Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: cardiac abnormalities.

Developmental Information

This material (or a component) has been shown to cause birth defects in laboratory animal studies. The relevance of these findings to humans is uncertain.

Cancer Information

There is sufficient evidence for the carcinogenicity of di(2-ethylhexyl)phthalate in experimental animals. Administered in the feed, this chemical caused an increased incidence of liver cancer in male and female rats and mice. The relevance of this finding to humans is uncertain. This material is listed as a carcinogen by the International Agency for Research on Cancer and the National Toxicology Program. Ethylbenzene has been shown to cause cancer in laboratory animals. The relevance of this finding to humans is uncertain.

Other Health Effects

No data

Primary Route(s) of Entry

Inhalation, Skin contact.

4. FIRST AID MEASURES

Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

Note to Physicians

This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 3 - Swallowing) when deciding whether to induce vomiting. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin lung (for example, asthma-like conditions), liver, kidney, central nervous system, heart, male reproductive system, eye. Exposure to this material may aggravate any preexisting condition sensitive to a decrease in available oxygen.
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oxygen, such as chronic lung disease, coronary artery disease or anemias.

5. FIRE FIGHTING MEASURES

Flash Point

20.0 - 30.0 F (-6.6 - -1.1 C) TCC

Explosive Limit

(for component) Lower .3 %

Autoignition Temperature

No data

Hazardous Products of Combustion

May form: carbon dioxide and carbon monoxide, various hydrocarbons.

Fire and Explosion Hazards

Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

Extinguishing Media

regular foam, water fog, carbon dioxide, dry chemical.

Fire Fighting Instructions

Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

NFPA Rating

Not determined

6. ACCIDENTAL RELEASE MEASURES

Small Spill

Eliminate all sources of ignition such as flares, flames (including pilot lights), and electrical sparks. Absorb liquid on vermiculite, floor absorbent or other absorbent material.

Large Spill

Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

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7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. All five-gallon pails and larger metal containers, including tank cars and tank trucks, should be grounded and/or bonded when material is transferred.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin Protection

Wear resistant gloves such as: nitrile rubber, polyethylene; To prevent repeated or prolonged skin contact, wear impervious clothing and boots..

Respiratory Protections

If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

Engineering Controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

Exposure Guidelines

Component

XYLENE (1330-20-7)

OSHA VPEL 100.000 ppm - TWA

OSHA VPEL 150.000 ppm - STEL

ACGIH TLV 100.000 ppm - TWA

ACGIH TLV 150.000 ppm - STEL

METHYL ETHYL KETONE (78-93-3)

OSHA VPEL 200.000 ppm - TWA

OSHA VPEL 300.000 ppm - STEL

ACGIH TLV 200.000 ppm - TWA

ACGIH TLV 300.000 ppm - STEL

DI(2-ETHYLHEXYL) PHTHALATE (117-81-7)

OSHA VPEL 5.000 mg/m3 - TWA

OSHA VPEL 10.000 mg/m3 - STEL

ACGIH TLV 5.000 mg/m3 - TWA

ETHYLBENZENE (100-41-4)

OSHA VPEL 100.000 ppm - TWA

OSHA VPEL 125.000 ppm - STEL

ACGIH TLV 100.000 ppm - TWA

ACGIH TLV 125.000 ppm - STEL

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9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point

(for component) 175.0 F (79.4 C) @ 760 mmHg

Vapor Pressure

(for component) 78.000 mmHg @ 68.00 F

Specific Vapor Density

> 1.000 @ AIR=1

Specific Gravity

.859 @ 77.00 F

Liquid Density

7.150 lbs/gal @ 77.00 F

.859 kg/l @ 25.00 C

Percent Volatiles

> 95.0 %

Evaporation Rate

SLOWER THAN ETHYL ETHER

Appearance

No data

State

LIQUID

Physical Form

HOMOGENEOUS SOLUTION

Color

No data

Odor

No data

pH

Not applicable

10. STABILITY AND REACTIVITY

Hazardous Polymerization

Product will not undergo hazardous polymerization.

Hazardous Decomposition

May form: carbon dioxide and carbon monoxide, various hydrocarbons.

Chemical Stability

Stable.

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Incompatibility

Avoid contact with: strong oxidizing agents.

11. TOXICOLOGICAL INFORMATION

No data

12. ECOLOGICAL INFORMATION

No data

13. DISPOSAL CONSIDERATION

Waste Management Information

Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution Company, IC&S Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101

DOT Description:

PAINT RELATED MATERIAL,3,UN1263,II

Container/Mode:

55 GAL DRUM/TRUCK PACKAGE

NOS Component:

None

RQ (Reportable Quantity) - 49 CFR 172.101

Product Quantity (lbs) Component

| | |
|-------|------------------------------|
| 140 | XYLENES (O-, M-, P- ISOMERS) |
| 2262 | DI (2-ETHYLHEXYL) PHTHALATE |
| 7360 | ETHYLBENZENE |
| 20775 | ETHYL METHYL KETONE |

15. REGULATORY INFORMATION

US Federal Regulations

TSCA (Toxic Substances Control Act) Status

TSCA (UNITED STATES). The intentional ingredients of this product are listed.

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CERCLA RQ - 40 CFR 302.4(a)

| Component | RQ (lbs) |
|------------------------------|----------|
| XYLENES (O-, M-, P- ISOMERS) | 100 |
| METHYL ETHYL KETONE | 5000 |
| DI(2-ETHYLHEXYL)PHTHALATE | 100 |
| ETHYLBENZENE | 1000 |

SARA 302 Components - 40 CFR 355 Appendix A

None

Section 311/312 Hazard Class - 40 CFR 370.2

Immediate(X) Delayed(X) Fire(X) Reactive() Sudden Release of Pressure()

SARA 313 Components - 40 CFR 372.65

| Section 313 Component(s) | CAS Number | % |
|---------------------------|------------|-------|
| XYLENE (MIXED ISOMERS) | 1330-20-7 | 70.51 |
| METHYL ETHYL KETONE | 78-93-3 | 25.64 |
| DI(2-ETHYLHEXYL)PHTHALATE | 117-81-7 | 3.85 |
| ETHYLBENZENE | 100-41-4 | 14.10 |

OSHA Process Safety Management 29 CFR 1910

None listed

EPA Accidental Release Prevention 40 CFR 68

None listed

International Regulations

Inventory Status
Not determined

State and Local Regulations

California Proposition 65

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the state of California to cause cancer.

DI(2-ETHYLHEXYL)PHTHALATE
BENZENE

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the state of California to cause reproductive harm.

BENZENE
TOLUENE

New Jersey RTK Label Information

| | |
|----------------------------|-----------|
| XYLENES | 1330-20-7 |
| METHYL ETHYL KETONE | 78-93-3 |
| BIS(2-ETHYLHEXYL)PHTHALATE | 117-81-7 |
| ETHYL BENZENE | 100-41-4 |

Pennsylvania RTK Label Information

| | |
|--|-----------|
| BENZENE, DIMETHYL- | 1330-20-7 |
| 2-BUTANONE | 78-93-3 |
| 1,2-BENZENEDICARBOXYLIC ACID, BIS(2-ETHYL- | 117-81-7 |
| BENZENE, ETHYL- | 100-41-4 |

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16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

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Date Prepared: 03/06/02
Date Printed: 09/16/02
MSDS No: 999.0001444-009.001

ISOPROPANOL 99%

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: ISOPROPANOL 99%
SAP Material No: 3507000 615 00A
General or Generic ID: ALCOHOL

Company

Ashland
Ashland Distribution Co. &
Ashland Specialty Chemical Co.
P. O. Box 2219
Columbus, OH 43216
614-790-3333

Emergency Telephone Number:
1-800-ASHLAND (1-800-274-5263)
24 hours everyday

Regulatory Information Number:
1-800-325-3751

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredient(s) | CAS Number | % (by weight) |
|---------------|------------|---------------|
| ISOPROPANOL | 67-63-0 | 99.0-100.0 |

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin

May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Swallowing

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits (See Section 8).

Symptoms of Exposure

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), low blood pressure, mild, temporary changes in the liver, effects on heart rate, respiratory depression (slowing of the breathing rate), loss of coordination, confusion, lung edema (fluid buildup in the lung tissue), kidney damage, coma.

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Date Prepared: 03/06/02

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MSDS No: 999.0001444-009.001

ISOPROPANOL 99%

Target Organ Effects

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects

Developmental Information

This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

Cancer Information

Based on the available information, this material cannot be classified with regard to carcinogenicity. This material is not listed as a carcinogen by the International Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health Administration.

Other Health Effects

No data

Primary Route(s) of Entry

Inhalation, Skin absorption, Skin contact, Eye contact, Ingestion.

4. FIRST AID MEASURES

Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

Note to Physicians

This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 3 - Swallowing) when deciding whether to induce vomiting. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin lung (for example, asthma-like conditions), kidney.

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ISOPROPANOL 99%

5. FIRE FIGHTING MEASURES

Flash Point

53.0 F (11.6 C) FCC

Explosive Limit

(for product) Lower 2.0 Upper 12.0 %

Autoignition Temperature

750.0 F (398.8 C)

Hazardous Products of Combustion

May form: carbon dioxide and carbon monoxide.

Fire and Explosion Hazards

Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

Extinguishing Media

alcohol foam, carbon dioxide, dry chemical.

Fire Fighting Instructions

Water may be ineffective. Water may be used to keep fire-exposed containers cool until fire is out. Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

NFPA Rating

Health - 1, Flammability - 3, Reactivity - 0

6. ACCIDENTAL RELEASE MEASURES

Small Spill

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

Large Spill

Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Per good environmental management practices, prevent run-off to sewers, streams and other bodies of water. Stop spill at the source. Cover sewer grates and dike the spill. Absorb spilled material on to absorbents. Shovel materials into container. Close container tightly and dispose of properly.

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Ashland

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Date Prepared: 03/06/02

Date Printed: 09/16/02

MSDS No: 999.0001444-009.001

ISOPROPANOL 99%

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. All five-gallon pails and larger metal containers, including tank cars and tank trucks, should be grounded and/or bonded when material is transferred. Warning. Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin Protection

Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

Respiratory Protections

If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

Engineering Controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

Exposure Guidelines

Component

ISOPROPANOL (67-63-0)

OSHA PEL 400.000 ppm - TWA

OSHA VPEL 400.000 ppm - TWA

OSHA VPEL 500.000 ppm - STEL

ACGIH TLV 400.000 ppm - TWA

ACGIH TLV 500.000 ppm - STEL

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point

(for product) 180.0 F (82.2 C) @ 760 mmHg

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ISOPROPANOL 99%

Vapor Pressure

(for product) 33.000 mmHg @ 68.00 F

Specific Vapor Density

2.070 @ AIR=1

Specific Gravity

.789 @ 60.00 F

Liquid Density

6.550 lbs/gal @ 68.00 F
.789 kg/l @ 15.60 C

Percent Volatiles

100.0 %

Volatile Organic Compounds (VOC)

100.000 %
789.000 g/l
6.550 lbs/gal

Evaporation Rate

7.70 (ETHYL ETHER)

Appearance

TRANSPARENT

State

LIQUID

Physical Form

NEAT

Color

CLEAR, PT-CO COLOR 10 MAX

Odor

SLIGHT ETHANOL/ACETONE-LIKE

pH

No data

Viscosity

2.4 cps

Freezing Point

-128.0 F (-88.8 C)

Molecular Weight

60.1

Solubility in Water

100%

Octanol/Water Partition Coefficient

1.400

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ISOPROPANOL 99%

Bulk Density
.880 lbs/ft3

10. STABILITY AND REACTIVITY

Hazardous Polymerization

Product will not undergo hazardous polymerization.

Hazardous Decomposition

May form: carbon dioxide and carbon monoxide.

Chemical Stability

Stable.

Incompatibility

Avoid contact with: acetaldehyde, acids, chlorine, ethylene oxide, isocyanates
strong oxidizing agents, Do not use with aluminum equipment at temperatures
above 120 degrees F..

11. TOXICOLOGICAL INFORMATION

No data

12. ECOLOGICAL INFORMATION

No data

13. DISPOSAL CONSIDERATION

Waste Management Information

Dispose of in accordance with all applicable local, state and federal
regulations. For assistance with your waste management needs - including
disposal, recycling and waste stream reduction, contact Ashland Distribution
Company, IC&S Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101

DOT Description:

ISOPROPANOL, 3, UN1219, II

Container/Mode:

55 GAL DRUM/TRUCK PACKAGE

NOS Component:

None

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ISOPROPANOL 99%

RQ (Reportable Quantity) ~ 49 CFR 172.101
Not applicable

Other Transportation Information

The DOT Transport Information may vary with the container and mode of shipment.

15. REGULATORY INFORMATION

US Federal Regulations

TSCA (Toxic Substances Control Act) Status

TSCA (UNITED STATES) The intentional ingredients of this product are listed.

CERCLA RQ ~ 40 CFR 302.4(a)

None listed

SARA 302 Components - 40 CFR 355 Appendix A

None

Section 311/312 Hazard Class ~ 40 CFR 370.2

Immediate(X) Delayed(X) Fire(X) Reactive() Sudden Release of
Pressure()

SARA 313 Components - 40 CFR 372.65

None

OSHA Process Safety Management 29 CFR 1910

None listed

EPA Accidental Release Prevention 40 CFR 68

None listed

International Regulations

Inventory Status

ACQIN (AUSTRALIA) The intentional ingredients of this product are listed.
AICS (AUSTRALIA) The intentional ingredients of this product are listed.
CICS (CHINESE) The intentional ingredients of this product are listed.
DSL (CANADA) The intentional ingredients of this product are listed.
ECL (SOUTH KOREA) The intentional ingredients of this product are listed.
EINECS (EUROPE) The intentional ingredients of this product are listed.
ENCS (JAPAN) The intentional ingredients of this product are listed.
PICCS (PHILIPPINES) The intentional ingredients of this product are listed.
SWISS (SWITZERLAND) The intentional ingredients of this product are listed.

State and Local Regulations

California Proposition 65

None

New Jersey RTK Label Information

ISOPROPYL ALCOHOL

67-63-0

Pennsylvania RTK Label Information

2-PROPANOL

67-63-0

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16. OTHER INFORMATION

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Date Printed: 09/13/02

MSDS No: 315-0001444-002-001

ISOPROPANOL 99%

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: ISOPROPANOL 99%

Company

Ashland
Ashland Distribution Co. &
Ashland Specialty Chemical Co.
P. O. Box 2219
Columbus, OH 43216
614-790-3333

Emergency Telephone Number:

1-800-ASHLAND (1-800-274-5263)
24 hours everyday

Regulatory Information Number:

1-800-325-3751

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredient(s) | CAS Number | % (by weight) |
|---------------|------------|---------------|
| ISOPROPANOL | 67-63-0 | 98.0-100.0 |

HAZARDS IDENTIFICATION

Potential Health Effects

Eye

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin

May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Swallowing

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 002

Date Prepared: 03/06/02

Date Printed: 09/13/02

MSDS No: 315.0001444-002.001

ISOPROPANOL 99%

Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits (See Section 8).

Symptoms of Exposure

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea) irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), low blood pressure, mild, temporary changes in the liver, effects on heart rate, respiratory depression (slowing of the breathing rate), loss of coordination, confusion, lung edema (fluid buildup in the lung tissue), kidney damage, coma.

Target Organ Effects

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects.

Developmental Information

This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

Cancer Information

Based on the available information, this material cannot be classified with regard to carcinogenicity. This material is not listed as a carcinogen by the International Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health Administration.

Other Health Effects

No data

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 003

Date Prepared: 03/06/02

Date Printed: 09/13/02

MSDS No: 315.0001444-002.001

ISOPROPANOL 99%

Primary Route(s) of Entry

Inhalation, Skin absorption, Skin contact, Eye contact, Ingestion.

4. FIRST AID MEASURES

Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

Note to Physicians

This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 3 - Swallowing) when deciding whether to induce vomiting. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions), kidney.

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 004

Date Prepared: 03/06/02

Date Printed: 09/13/02

MSDS No: 315.0001444-002.001

ISOPROPANOL 99%

5. FIRE FIGHTING MEASURES

Flash Point

11.6 C (53.0 F) TCC

Explosive Limit

No data

Autoignition Temperature

398.8 C (750.0 F)

Hazardous Products of Combustion

May form: carbon dioxide and carbon monoxide.

Fire and Explosion Hazards

Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

Extinguishing Media

alcohol foam, carbon dioxide, dry chemical.

Fire Fighting Instructions

Water may be ineffective. Water may be used to keep fire-exposed containers cool until fire is out. Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

NFPA Rating

Not determined

NFPA 30 Classification

Flammable Liquid Class IB

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland

Page 005

Date Prepared: 03/06/02

Date Printed: 09/13/02

MSDS No: 315.0001444-002.001

ISOPROPANOL 99%

6. ACCIDENTAL RELEASE MEASURES

Small Spill

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

Large Spill

Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Per good environmental management practices, prevent run-off to sewers, streams and other bodies of water. Stop spill at the source. Cover sewer grates and dike the spill. Absorb spilled material on to absorbents. Shovel materials into container. Close container tightly and dispose of properly.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. All five-gallon pails and larger metal containers, including tank cars and tank trucks, should be grounded and/or bonded when material is transferred. Warning. Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

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MATERIAL SAFETY DATA SHEET

Ashland

Page 006

Date Prepared: 03/06/02

Date Printed: 09/13/02

MSDS No: 315.0001444-002.001

ISOPROPANOL 99%

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin Protection

Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

Respiratory Protections

If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

Engineering Controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

Exposure Guidelines

Component

ISOPROPANOL (67-63-0)

TLV 200.000 ppm - TWA

TLV 400.000 ppm - STEL

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point

(for product) 38 -17.7 C (-0 -LIKE) @ 760 mmHg

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MATERIAL SAFETY DATA SHEET

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Page 007

Date Prepared: 03/06/02

Date Printed: 09/13/02

MSDS No: 315.0001444-002.001

ISOPROPANOL 99%

Vapor Pressure
(for product) 33.000 mmHg @ 68.00 F

Specific Vapor Density
2.070 @ AIR=1

Specific Gravity
.789 @ 60.00 F

Liquid Density
6.550 lbs/gal @ 68.00 F
.789 kg/l @ 15.60 C

Percent Volatiles
100.0 %

Volatile Organic Compounds (VOC)
100.000 %
789.000 g/l
6.550 lbs/gal

Evaporation Rate
7.70 (ETHYL ETHER)

Appearance
TRANSPARENT

State
LIQUID

Physical Form
NEAT

Color
CLEAR, PT-CO COLOR 10 MAX

Odor
SLIGHT ETHANOL/ACETONE-LIKE

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MATERIAL SAFETY DATA SHEET

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Page 008
Date Prepared: 03/06/02
Date Printed: 09/13/02
MSDS No: 315.0001444-002.001

ISOPROPANOL 99%

pH

No data

Viscosity

2.4 cps

Freezing Point

-88.8 C (-128.0 F)

Molecular Weight

60.1

Solubility in Water

100%

Octanol/Water Partition Coefficient

1.400

Bulk Density

.880 lbs/ft³

10. STABILITY AND REACTIVITY

Hazardous Polymerization

Product will not undergo hazardous polymerization.

Hazardous Decomposition

May form: carbon dioxide and carbon monoxide.

Chemical Stability

Stable.

Incompatibility

Avoid contact with: acetaldehyde, acids, chlorine, ethylene oxide isocyanates, strong oxidizing agents. Do not use with aluminum equipment at temperatures above 120 degrees F..

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MATERIAL SAFETY DATA SHEET

Ashland

Page 009

Date Prepared: 03/06/02

Date Printed: 09/13/02

MSDS No: 315.0001444-002.001

ISOPROPANOL 99%

11. TOXICOLOGICAL INFORMATION

50 and LC 50 Data

ISOPROPANOL (CAS# 67-63-0)
Oral LD50 (rat): 5045 mg/kg
Dermal LD50 (rabbit): 12,800 mg/kg
Inhalation LC50 (rat, 4 hour): 16,000 ppm

12. ECOLOGICAL INFORMATION

No data

13. DISPOSAL CONSIDERATION

Waste Management Information

Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution Company, IC&S Environmental Services Group at 800-637-7922.

14. TRANSPORTATION INFORMATION

3 Information

TDG Description:
ISOPROPANOL, 3, UN1219, II

Container/Mode
55 GAL DRUM/TRUCK PACKAGE

NOS Component:
None

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MATERIAL SAFETY DATA SHEET

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ISOPROPANOL 99%

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Other Transportation Information

The DOT Transport Information may vary with the container and mode of shipment.

15. REGULATORY INFORMATION

Canada

WHMIS Classification

Class A - Compressed Gas

Does not meet criteria

Class B - Flammable & Combustible Material

B2 - Flammable and combustible material - Flammable liquid

Class C - Oxidizing Material

Does not meet criteria

Class D - Poisonous & Infectious - Division 1

Does not meet criteria

Class D - Poisonous & Infectious - Division 2

D2B - Poisonous and infectious material - Other effects - Toxic

Class E - Corrosive Material

Does not meet criteria

Class F - Dangerously Reactive Material

Does not meet criteria

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MATERIAL SAFETY DATA SHEET

Ashland

Page 011

Date Prepared: 03/06/02

Date Printed: 09/13/02

MSDS No: 315-0001444-002.001

ISOPROPANOL 99%

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

DSL (Domestic Substance List) Status

DSL (CANADA) The intentional ingredients of this product are listed.

International Regulations

Inventory Status

ACQIN (AUSTRALIA) The intentional ingredients of this product are listed.

AICS (AUSTRALIA) The intentional ingredients of this product are listed.

CICS (CHINESE) The intentional ingredients of this product are listed.

ECL (SOUTH KOREA) The intentional ingredients of this product are listed.

EINECS (EUROPE) The intentional ingredients of this product are listed.

ENCS (JAPAN) The intentional ingredients of this product are listed.

PICCS (PHILIPPINES) The intentional ingredients of this product are listed.

SWISS (SWITZERLAND) The intentional ingredients of this product are listed.

TSCA (UNITED STATES) The intentional ingredients of this product are listed.

1) OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

Last page

SOURCE: ASHLAND INC WTR EASYWTR

MATERIAL SAFETY DATA SHEET

Ashland

Page 001

Date Prepared: 10/31/01

Date Printed: 01/08/02

MSDS No: 301.0293236-004.004

BLEND 3078 C

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: BLEND 3078 C

SAP Material No: 2704704 415 00A

General or Generic ID: SOLVENT BLEND

Company

Ashland

Ashland Distribution Co. &

Ashland Specialty Chemical Co.

P. O. Box 2219

Columbus, OH 43216

614-790-3333

Emergency Telephone Number:

1-800-ASHLAND (1-800-274-5263)

24 hours everyday

Regulatory Information Number:

1-800-325-3751

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredient(s) | CAS Number | % (by volume) |
|--|------------|---------------|
| ALIPHATIC HYDROCARBONS (STODDARD TYPE) | 8052-41-3 | 28.0- 32.0 |
| AROMATIC PETROLEUM DISTILLATES | 64742-95-6 | 18.0- 22.0 |
| ALIPHATIC PETROLEUM DISTILLATES | 64742-89-8 | 18.0- 22.0 |
| ISOPROPANOL | 67-63-0 | 13.0- 17.0 |
| ACETONE | 67-64-1 | 13.0- 17.0 |
| 1,2,4-TRIMETHYLBENZENE | 95-63-6 | 4.0- 4.0 |
| 1,3,5-TRIMETHYLBENZENE | 108-67-8 | 1.0- 3.8 |
| XYLENE | 1330-20-7 | 1.4- 1.4 |

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin

Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, burns and other skin damage. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Swallowing

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits (See Section 8).

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MATERIAL SAFETY DATA SHEET

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Page 002

Date Prepared: 10/31/01

Date Printed: 01/08/02

MSDS No: 301.0293236-004.004

BLEND 3078 C

Symptoms of Exposure

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: mouth and throat irritation (soreness, dry or scratchy feeling, cough), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), cough, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, temporary changes in mood and behavior, low blood pressure, mild, temporary changes in the liver; effects on heart rate, respiratory depression (slowing of the breathing rate), shortness of breath, loss of coordination, confusion, irregular heartbeat, high blood sugar, lung edema (fluid buildup in the lung tissue), kidney damage, coma.

Target Organ Effects

Exposure to this material (or a component) has been found to cause kidney damage in male rats. The mechanism by which this toxicity occurs is specific to the male rat and the kidney effects are not expected to occur in humans. This material (or a component) shortens the time of onset or worsens the liver and kidney damage induced by other chemicals. Prolonged intentional toluene abuse may lead to hearing loss progressing to deafness. In addition, while noise is known to cause hearing loss in humans, it has been suggested that workers exposed to organic solvents, including toluene, along with noise may suffer greater hearing loss than would be expected from exposure to noise alone. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible kidney effects, blood abnormalities, cardiac sensitization, cataracts, kidney damage, effects on hearing, central nervous system damage.

Developmental Information

This material (or a component) has been shown to cause birth defects in laboratory animal studies. The relevance of these findings to humans is uncertain. This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

Cancer Information

Based on the available information, this material cannot be classified with regard to carcinogenicity. This material is not listed as a carcinogen by the International Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health Administration.

Other Health Effects

No data

Primary Route(s) of Entry

Inhalation, Skin absorption, Skin contact, Eye contact, Ingestion.

4: FIRST AID MEASURES

Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

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MATERIAL SAFETY DATA SHEET

Ashland

Page 003

Date Prepared: 10/31/01

Date Printed: 01/08/02

MSDS No: 301.0293236-004.004

BLEND 3078 C

Skin

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

Note to Physicians

Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 3 - Swallowing) when deciding whether to induce vomiting. This material (or a component) has produced hyperglycemia and ketosis following substantial ingestion. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions), liver, kidney, blood-forming system, auditory system, eye. Individuals with preexisting heart disorders may be more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this material.

5. FIRE FIGHTING MEASURES

Flash Point

< -18.3°C (-1B.3°F) (C) (TCC)

Explosive Limit

(for component) Lower 49.5% (TCC)

Autoignition Temperature

No data

Hazardous Products of Combustion

May form: carbon dioxide and carbon monoxide, various hydrocarbons.

Fire and Explosion Hazards

Material is highly volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

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MATERIAL SAFETY DATA SHEET

Ashland

Page 004

Date Prepared: 10/31/01

Date Printed: 01/08/02

MSDS No: 301.0293236-004.004

BLEND 3078 C

Extinguishing Media

regular foam, carbon dioxide, dry chemical.

Fire Fighting Instructions

Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

NFPA Rating

Not determined

6. ACCIDENTAL RELEASE MEASURES

Small Spill

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

Large Spill

Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. All five-gallon pails and larger metal containers, including tank cars and tank trucks, should be grounded and/or bonded when material is transferred. Warning: Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

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MATERIAL SAFETY DATA SHEET

Ashland

Page 005
Date Prepared: 10/31/01
Date Printed: 01/08/02
MSDS No: 301.0293236-004.004

BLEND 3078 C

Skin Protection

Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots..

Respiratory Protections

If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

Engineering Controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

Exposure Guidelines

Component

ALIPHATIC HYDROCARBONS (STODDARD TYPE) (8052-41-3)

OSHA PEL 500.000 ppm - TWA
OSHA VPEL 100.000 ppm - TWA
ACGIH TLV 100.000 ppm - TWA

AROMATIC PETROLEUM DISTILLATES (64742-95-6)
No exposure limits established

ALIPHATIC PETROLEUM DISTILLATES (64742-89-8)
No exposure limits established

ISOPROPANOL (67-63-0)
OSHA PEL 400.000 ppm - TWA
OSHA VPEL 400.000 ppm - TWA
OSHA VPEL 500.000 ppm - STEL
ACGIH TLV 400.000 ppm - TWA
ACGIH TLV 500.000 ppm - STEL

ACETONE (67-64-1)
OSHA PEL 1000.000 ppm - TWA
OSHA VPEL 750.000 ppm - TWA
OSHA VPEL 1000.000 ppm - STEL
ACGIH TLV 500.000 ppm - TWA
ACGIH TLV 750.000 ppm - STEL

1,2,4-TRIMETHYLBENZENE (95-63-6)
No exposure limits established

1,3,5-TRIMETHYLBENZENE (108-67-8)
No exposure limits established

XYLENE (1330-20-7)
OSHA PEL 100.000 ppm - TWA
OSHA VPEL 100.000 ppm - TWA
OSHA VPEL 150.000 ppm - STEL
ACGIH TLV 100.000 ppm - TWA
ACGIH TLV 150.000 ppm - STEL

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MATERIAL SAFETY DATA SHEET

Ashland

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Date Prepared: 10/31/01

Date Printed: 01/08/02

MSDS No: 301.0293236-004.004

BLEND 3078 C

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point

(for component) 133.0 F (56.1 C) @ 760 mmHg

Vapor Pressure

(for component) 185.000 mmHg @ 68.00 F

Specific Vapor Density

> 1.000 @ AIR=1

Specific Gravity

1.793 @ 77.00 F

Liquid Density

6.500 lbs/gal @ 77.00 F
.793 kg/l @ 25.00 C

Percent Volatiles

100.0 %

Evaporation Rate

SLOWER THAN ETHYL ETHER

Appearance

No data

State

LIQUID

Physical Form

HOMOGENEOUS SOLUTION

Color

No data

Odor

No data

pH

Not applicable

10. STABILITY AND REACTIVITY

Hazardous Polymerization

Product will not undergo hazardous polymerization.

Hazardous Decomposition

May form: carbon dioxide and carbon monoxide, various hydrocarbons.

Chemical Stability

Stable.

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MATERIAL SAFETY DATA SHEET

Ashland

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Date Prepared: 10/31/01
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BLEND 3078 C

Incompatibility

Avoid contact with: acetaldehyde, acids, chlorine, ethylene oxide, isocyanates strong oxidizing agents, Do not use with aluminum equipment at temperatures above 120 degrees F..

11. TOXICOLOGICAL INFORMATION

No data

12. ECOLOGICAL INFORMATION

No data

13. DISPOSAL CONSIDERATION

Waste Management Information

Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution Company, IC&S Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101

DOT Description:

PAINT RELATED MATERIAL, 3, UN1263, II

Container/Mode:

55 GAL DRUM/TRUCK PACKAGE

NOS Component:

None

RQ (Reportable Quantity) - 49 CFR 172.101

Product Quantity (lbs) Component

11302
33382

XYLENES (O-, M-, P- ISOMERS)
ACETONE

Other Transportation Information

The DOT Transport Information may vary with the container and mode of shipment.

15. REGULATORY INFORMATION

US Federal Regulations

TSCA (Toxic Substances Control Act) Status

TSCA (UNITED STATES) The intentional ingredients of this product are listed.

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MATERIAL SAFETY DATA SHEET

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Date Prepared: 10/31/01
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BLEND 3078 C

CERCLA RQ - 40 CFR 302.4(a)

| Component | RQ (lbs) |
|------------------------------|----------|
| ACETONE | 5000 |
| XYLENES (O-, M-, P- ISOMERS) | 1000 |

CERCLA RQ - 40 CFR 302.4(b)

Materials without a "listed" RQ may be reportable as an "unlisted hazardous substance". See 40 CFR 302.5 (b).

SARA 302 Components - 40 CFR 355 Appendix A

None

Section 311/312 Hazard Class - 40 CFR 370.2

Immediate(X) Delayed(X) Fire(X) Reactive() Sudden Release of Pressure()

SARA 313 Components - 40 CFR 372.65

| Section 313 Component(s) | CAS Number | % |
|--------------------------|------------|------|
| 1,2,4-TRIMETHYLBENZENE | 95-63-6 | 4.00 |
| XYLENE (MIXED ISOMERS) | 1330-20-7 | 1.40 |

OSHA Process Safety Management 29 CFR 1910

None listed

EPA Accidental Release Prevention 40 CFR 68

None listed

International Regulations

Inventory Status

Not determined

State and Local Regulations

California Proposition 65

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the state of California to cause cancer.
BENZENE

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the state of California to cause reproductive harm.

TOLUENE

BENZENE

New Jersey RTK Label Information

| | |
|------------------------|------------|
| STODDARD SOLVENT | 8052-41-3 |
| NAPHTHA, SOLVENT | 64742-89-8 |
| ISOPROPYL ALCOHOL | 67-63-0 |
| ACETONE | 67-64-1 |
| PSEUDOCUMENE | 95-63-6 |
| 1,3,5-TRIMETHYLBENZENE | 108-67-8 |
| XYLENES | 1330-20-7 |

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Pennsylvania RTK Label Information

STODDARD SOLVENT
2-PROPANOL
2-PROPANONE
PSEUDOCUMENE
BENZENE, DIMETHYL-

8052-41-3
67-63-0
67-64-1
95-63-6
1330-20-7

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

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Date Prepared: 08/03/99
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MSDS No: 301-0293236-004-002

BLEND 3078 C

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: BLEND 3078 C
Product Code: 2704704
General or Generic ID: SOLVENT BLEND

Company

Ashland
Ashland Distribution Co. &
Ashland Specialty Chemical Co.
P. O. Box 2219
Columbus, OH 43216
614-790-3333

Emergency Telephone Number:
1-800-ASHLAND (1-800-274-5263)
24 hours everyday

Regulatory Information Number:
1-800-325-3751

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredient(s) | CAS Number | % (by volume) |
|--|------------|---------------|
| ALIPHATIC HYDROCARBONS (STODDARD TYPE) | 8052-41-3 | 28.0- 32.0 |
| AROMATIC PETROLEUM DISTILLATES | 64742-95-6 | 18.0- 22.0 |
| ALIPHATIC PETROLEUM DISTILLATES | 64742-89-8 | 18.0- 22.0 |
| ISOPROPANOL | 67-63-0 | 13.0- 17.0 |
| ACETONE | 67-64-1 | 13.0- 17.0 |
| 1,2,4-TRIMETHYLBENZENE | 95-63-6 | 4.0- 4.0 |
| 1,3,5-TRIMETHYLBENZENE | 108-67-6 | 1.0- 3.8 |
| XYLENE | 1330-20-7 | 1.4- 1.4 |

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin

Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, burns and other skin damage. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Swallowing

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits (See Section 8).

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BLEND 307B C

Symptoms of Exposure

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: mouth and throat irritation (soreness, dry or scratchy feeling, cough), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), cough, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, temporary changes in mood and behavior, low blood pressure, mild, temporary changes in the liver, effects on heart rate, respiratory depression (slowing of the breathing rate), shortness of breath, loss of coordination, confusion, irregular heartbeat, high blood sugar, lung edema (fluid buildup in the lung tissue), kidney damage, coma.

Target Organ Effects

Exposure to this material (or a component) has been found to cause kidney damage in male rats. The mechanism by which this toxicity occurs is specific to the male rat and the kidney effects are not expected to occur in humans. This material (or a component) shortens the time of onset or worsens the liver and kidney damage induced by other chemicals. Prolonged intentional toluene abuse may lead to hearing loss progressing to deafness. In addition, while noise is known to cause hearing loss in humans, it has been suggested that workers exposed to organic solvents, including toluene, along with noise may suffer greater hearing loss than would be expected from exposure to noise alone. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible kidney effects, blood abnormalities, cardiac sensitization, cataracts, kidney damage, effects on hearing, central nervous system damage.

Developmental Information

This material (or a component) has been shown to cause birth defects in laboratory animal studies. The relevance of these findings to humans is uncertain. This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

Cancer Information

Based on the available information, this material cannot be classified with regard to carcinogenicity. This material is not listed as a carcinogen by the International Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health Administration.

Other Health Effects

No data

Primary Route(s) of Entry

Inhalation, Skin absorption, Skin contact, Eye contact, Ingestion.

4. FIRST AID MEASURES

Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

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Page 003

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BLEND 3078 C

Skin

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

Note to Physicians

Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 3 - Swallowing) when deciding whether to induce vomiting. This material (or a component) has produced hyperglycemia and ketosis following substantial ingestion. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions), liver, kidney, auditory system, eye. Individuals with preexisting heart disorders may be more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this material.

5. FIRE FIGHTING MEASURES

Flash Point

< -1.0 F (-18.3 C) TCC

Explosive Limit

(for component) Lower -9 %

Autoignition Temperature

No data

Hazardous Products of Combustion

May form: carbon dioxide and carbon monoxide, various hydrocarbons.

Fire and Explosion Hazards

Material is highly volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

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